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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/662,409	09/14/2000	JEFFREY A. WOLK	100/06410	1271

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CALIPER TECHNOLOGIES CORP  
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MOUNTAIN VIEW, CA 94043

EXAMINER

STARSIK, JOHN S

ART UNIT	PAPER NUMBER
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1753

6

DATE MAILED: 06/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

9/662,409

Applicant(s)

Jeffrey A. Wolk

Examiner

J. STARSIAK

Group Art Unit

1753

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

☒ Responsive to communication(s) filed on 14 September 2000

☐ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

☒ Claim(s) 2-9 is/are pending in the application.

Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 2-9 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement

## Application Papers

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).

☐ All ☐ Some\* ☐ None of the:

☐ Certified copies of the priority documents have been received.

☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

☐ Copies of the certified copies of the priority documents have been received  
in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☒ Notice of Reference(s) Cited, PTO-892

☐ Notice of Informal Patent Application, PTO-152

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Other \_\_\_\_\_

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States and was published under Article 21(2) of such treaty in the English Language.

Claims 2-4, 6, 8, and 9 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Parce et al.

Parce et al. teaches [col. 3, lines 62-65]: "FIG. 1 discloses a representative diagram of an exemplary microfluidic system 100 according to the present invention. As shown, the overall device 100 is fabricated in a planar substrate 102." Parce et al. teaches [col. 2, lines 59-64]: "The present invention also provides for a electropipettor which is compatible with a micrifluidic system which moves subject materials with electroosmotic forces. The electropipettor has a capillary having a channel. An electrode is attached along the outside length of the capillary and

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terminates in a electrode ring at the end of the capillary.” Parce et al. teaches [col. 8, line 30-49]:  
“As illustrated in FIG. 4A, an electropipettor 250 is formed by a hollow capillary tube 251. The capillary tube 251 has a channel 254 with the dimensions of the channels of the microfluidic system 100 to which the channel 254 is fluidly connected. As shown in FIG. 4A, the channel 254 is a cylinder having a cross-sectional diameter in the range of 1-100  $\mu\text{m}$ . With a diameter of approximately 30  $\mu\text{m}$  being preferable. An electrode 252 runs down the outside wall of the capillary tube 251 and terminates in a ring electrode 253 around the end of the tube.”

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chow et al. in view of Parce et al.

Chow et al. teaches [col. 7, line 55 to col.8, line 15]: “FIG. 1 is a schematic illustration of a microfluidic device and integrated pipettor element...As shown, the device 100 includes a main body structure 102 that includes a channel network disposed in its interior. The channel network

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includes a main analysis channel 104, which fluidly connects a sample inlet 106 with a waste reservoir 108...The device also includes a capillary element 138 which includes an internal capillary channel running its length, the capillary channel communicating with the analysis channel 104 via the sample inlet 106.” Chow et al. teaches [col. 8, lines 31 to 45]: “An example of a device similar to that shown in FIG. 1, but including a collinear, substantially rectangular capillary element, is shown in FIG. 2A...As shown, the overall device 100 again includes a main body structure 102 as described with reference to FIG. 1, which includes an integrated channel network disposed in its interior. The rectangular capillary element 238 includes a capillary channel 240 running its length. The capillary element is attached to the body structure via a rectangular opening 242 in the body structure 102. Insertion of a rectangular end of the capillary element 238 into rectangular opening 242 places the capillary channel 240 into fluid communication with at least one of the channels in the integrated channel network within the body structure.” Chow et al. teaches [col. 11, lines 39 to 57]: “FIG. 3 is a schematic illustration of a microfluidic device incorporating an integrated pipettor element....As shown, the system 300 includes a microfluidic device 100, which incorporates an integrated pipettor/capillary element 138...electrode 338, also coupled to controller 302, is positioned so as to be placed in electrical contact with the material that is to be sampled, e.g., in multiwell plate 340, when the capillary element 138 is dipped into the material. For example, electrode 338 may be a conductive coating applied over capillary 138 and connected to an electrical lead which is operably coupled to controller 302.” Hence, the only difference between the claims and Chow et al. is the Chow et al. is silent concerning extending the

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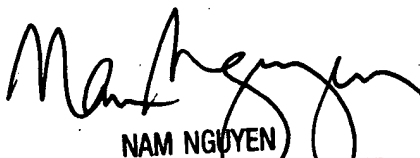
conductive layer to the second end of the capillary element. Parce et al discloses and electropipettor in which the electrode extends to the second end of the capillary element (see 102 rejection above). It would have been obvious to one of ordinary skill in the art at the time of the invention to fabricate the conductive coating of Chow et al. such that the conductive coating extends to the second end of the capillary element because this would minimize the amount of sample needed to perform an analysis.


### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John S. Starsiak Jr. whose telephone number is (703) 308-1797. The examiner can normally be reached on Monday to Wednesday from 8:00 AM to 3:30 PM and on Thursday and Friday from 8:00 to 12:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen, can be reached on (703) 308-3322. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

  
NAM NGUYEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700

  
John S. Starsiak Jr.  
29 May 2003